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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/725,028

12/02/2003

Hideshi Maeno

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BUCHANAN INGERSOLL PC  
(INCLUDING BURNS, DOANE, SWECKER & MATHIS)  
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EXAMINER

TRIMMINGS, JOHN P

ART UNIT

PAPER NUMBER

2138

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/725,028

Applicant(s)

MAENO, HIDESHI

Examiner

John P. Trimmings

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2138

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12/02/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☒ Claim(s) 10-18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/02/2003</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

Claims 1-18 are presented for examination.

#### ***Priority***

1. Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 119 and 120 as follows:

The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original nonprovisional application or provisional application). The disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994).

The disclosure of the prior-filed application, Application No. 10/611,172, fails to provide adequate support or enablement in the manner provided by the first paragraph of 35 U.S.C. 112 for one or more claims of this application. As per Claims 10-18 in the instant application, the parent application fails to disclose the location of the flip-flop scan cell.

2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 10/14/2003. It is noted, however, that applicant has not

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filed a certified copy of the English language translation of the application as required by 35 U.S.C. 119(b).

3. Should applicant desire to obtain the benefit of foreign priority under 35 U.S.C. 119(a)-(d) prior to declaration of an interference, a translation of the foreign application should be submitted under 37 CFR 1.55 in reply to this action.

#### ***Information Disclosure Statement***

4. The information disclosure statement filed 12/02/2003 fails to comply with 37 CFR 1.98(a)(2)(i), which requires a legible copy of each cited foreign patent document. It has been placed in the application file, but the information referred to therein in respect to Foreign Patent Documents has not been considered.

The examiner has however considered the documents under US Patent Documents.

#### ***Specification***

5. The disclosure is objected to because of the following informalities: Page 9 line 3 should be corrected to read, "... an embodiment 5 15 of the ...".

Appropriate correction is required.

#### ***Claim Objections***

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6. Claim 2 is objected to because of the following informalities: In the interest of clarity, the 3<sup>rd</sup> line of the claim should be amended to read, "... to the outside of the parallel path ...".

7. Claims 3, 11, 12, 13, 14, 17 and 18 are objected to because of the following informalities: In the interest of clarity, the limitation, "... to all zero or all one by one-time shift operation ..." would be better understood if it were rewritten to clarify what is happening to the data in the flip-flops. For instance, the examiner feels that a limitation such as, "...by alternating to all zeros or all ones each shift operation clock cycle." would be clearer. The examiner requests that the applicant clarify said claims in such a manner.

Appropriate correction is required.

### ***Double Patenting***

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to

be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 1-2 are provisionally rejected on the ground of nonstatutory double patenting over claims 1-9 of copending Application No. 10/611,172. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows: Each of Claims 1-2 in both applications claim the limitations of Figure 4 in the instant application.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

10. Claims 1-2 of this application conflict with claims 1-2 of Application No. 10/611,172. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either

cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

11. Claims 3-9 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 3-9 of copending Application No. 10/611,172. Although the conflicting claims are not identical, they are not patentably distinct from each other because; the limitation of Claim 3, "... to change the data to be provided to said RAM to all zero or all one by one-time shift operation.", is an obvious statement of fact and is based on the construction of the circuit only, and is an intended use statement that results from the circuit design. The construction of the said circuit as outlined in the claims is the determining factor that alternates the data, and so such a limitation is actually a result of the circuit construction, and so it is obvious that ones and zeros alternate during test. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

#### ***Allowable Subject Matter***

12. Claims 1-9 would be allowable if rewritten to overcome the rejections under 35 U.S.C. 101, set forth in this Office action. The following is an examiner's statement of reasons for allowance: The reference art of Motohara, U.S. Patent No. 5729553 and Osawa et al., U.S. Patent No. 5960008 teach an IC comprising a 1<sup>st</sup> and 2<sup>nd</sup> logic section, a functional block between the two, a parallel data path making use of selectors to direct normal data flow through the functional block to the 2<sup>nd</sup> logic section and to

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feed back to scan cell serial shift path flip-flops the data output of the functional block during test, and to shift test data in and out of the IC. However, the references fail to teach, suggest or disclose the unique feature claimed by the applicant in Claim 1, namely, that the serial shift path is connected to the input of said functional block and a plurality of flip-flops for storing data. Therefore, Claim 1, and dependent Claims 2-9 are allowable.

13. Claims 10-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is an examiner's statement of reasons for allowance: The reference art of Motohara, U.S. Patent No. 5729553 and Osawa et al., U.S. Patent No. 5960008 teach an IC comprising a 1<sup>st</sup> and 2<sup>nd</sup> logic section, a functional block between the two, a parallel data path making use of selectors to direct normal data flow through the functional block to the 2<sup>nd</sup> logic section and to feed back to scan cell serial shift path flip-flops the data output of the functional block during test, and to shift test data in and out of the IC. However, the references fail to teach, suggest or disclose the unique feature claimed by the applicant in Claim 10, namely, that the flip-flops in the scan path have; inputs connected to outputs of the 2<sup>nd</sup> selectors, and outputs connected to the input of the 2<sup>nd</sup> logic section. Therefore, Claim 10, and dependent Claims 11-18 are allowable.



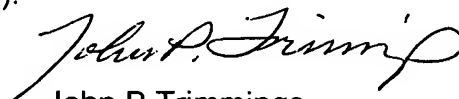
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Trimmings whose telephone number is (571) 272-3830. The examiner can normally be reached on Monday through Thursday, 7:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John P Trimmings  
Examiner  
Art Unit 2138



**GUY LAMARRE**  
**PRIMARY EXAMINER**